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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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PATENT ADMINSTRATOR
KATTEN MUCHIN ZAVIS ROSENMAN
525 WEST MONROE STREET
SUITE 1600
CHICAGO, IL 60661-3693

EXAMINER

HOEY, BETSEY MORRISON

ART UNIT PAPER NUMBER

1724

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/014,898

Applicant(s)

TRAUBENBERG ET AL

Examiner

HOEY, BETSEY

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-47 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 8-14, 17, 20 and 21 is/are rejected.
- 7) ☒ Claim(s) 5, 7, 15, 16, 18 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 22-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 22 recites a confining element moveable between a first position to define a closed zone and a second position to define an open zone, but also claims that a portion of a radiation source element is disposed in the closed zone. It appears that the system recited in claim 22 only comprises a closed zone *if and when* the confining element is in a second position, and therefore it is unclear where the radiation source element is located in the system when the confining element is in a first position. This omission creates a lack of nexus between elements of the system.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-4 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Pearcey et al., U.S. Patent No. 6,342,188 (see especially figures and columns 5 and 7). Referring to their figures, Pearcey et al. teach a radiation source module comprising a frame having a support member (column 3); a support member 105; a second support member 110, which is shown to be opposed to support member 105; a cross piece 115, interconnecting support members 105 and 110; a ballast disposed in the frame for supplying power; and sealing members such as 183 and 184, for providing fluid tight seals between two surfaces of the module.

5. Claims 10-14 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Pearcey et al. (see above). Pearcey et al. teach a fluid treatment system comprising the radiation source module described above. On page 4 of the instant specification, prior art systems are described as having a closed surface confining fluid being treated in a treatment area of a reactor, wherein the system has open ends disposed in an open channel. As shown best in Figure 2, the module of Pearcey et al. is disposed in an open channel wherein fluid is confined to be treated within a treatment zone, as described in the instant specification. The module of Pearcey et al. comprises a frame, support legs, cross piece, and power supply as described above.

6. The applied reference of Pearcey et al. has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e)

might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 8, 9, 20 and 21 are rejected under 35 U.S.C. 103(a) as being obvious over Pearcey et al. (see above). Pearcey et al. disclose the radiation source module described above. The claims differ from Pearcey et al. by reciting an expandable seal (claims 8 and 20) and a deformable seal (claims 9 and 21).

It is submitted that while Pearcey et al. do not specifically mention "an expandable seal" or "a deformable seal", Pearcey et al. do disclose that the fluid seals include a biasing member 187, which may be an expandable bladder, spring, or the like. Based on this disclosure, one of ordinary skill in the art, when making the module of Pearcey et al., would have been motivated to use seals constructed so as to expand, contract, move, deform, etc. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the present invention was made, to have made the radiation source module of Pearcey et al. with seals that are expandable or deformable, in order to effectively provide protection against fluid leaks.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2).

9. Claims 5, 7, 15, 16, 18 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claims 22-47 are allowed.

11. The following is a statement of reasons for the indication of allowable subject matter:

Claims 5, 15 and 16 would be allowed if rewritten in independent form, including all of the limitations of claims 1-4 (for claim 5) or claims 10-14 (for claims 15 and 16), because the prior art of record fails to teach, disclose, or fairly suggest a radiation source module and fluid treatment system comprising a radiation source module having a seal disposed on a third support member (claim 5) or at least one of the first, second or third support members (claims 15 and 16), wherein the support members are arranged as recited in preceding claims upon which the rejected depend, in combination with all of the other limitations of the claims. It is submitted that the seals of Pearcey et al. are shown to be on their cleaning apparatus or connection members, rather than disposed on any of the support members as recited in the instant claims.

Claims 7, 18 and 19 would be allowed if rewritten in independent form, including all of the limitations of claims 1 or 10, because the prior art of record fails to teach, disclose, or fairly suggest a radiation source module and fluid treatment system comprising a radiation source module having an extraction system or blocking plate for use in an extraction position, in combination with all of the other limitations of the claims. It is submitted that Pearcey et al. do not suggest an extraction system, but rather teach away from using an extraction system by incorporating a cleaning apparatus within their radiation source module. It is further submitted that while other inventions teach radiation sources which are extractable for cleaning or replacing, none of the prior art inventions disclose such radiation sources that include all of the other limitations included in claims 7, 18 or 19.

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Claims 33-47 are allowed because the prior art of record fails to teach, disclose, or fairly suggest a radiation source module comprising a confining element having a surface disposed at a distance from an adjacent radiation source which is equal to a predetermined fraction of a center-to-center distance, wherein the center-to-center distance is defined as the distance between the concentric longitudinal axis of adjacent radiation sources, in combination with the other limitations of the claim.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betsey Hoey whose telephone number is **(571) 272-1158**. The examiner can normally be reached on Mondays, Tuesdays, Thursdays and Fridays from 7:30-11:30 AM. The examiner's supervisor, Mr. Blaine Copenheaver, may be reached at (571) 272-1156. Any inquiry of general nature may be directed to the Group receptionist at (571) 272-0987. The centralized fax number for the Group is (703) 872-9306. The examiner Rightfax number is (571) 273-1158.

Betsey M. Hoey
BETSEY MORRISON HOEY
PRIMARY EXAMINER

June 1, 2004